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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/592,975

09/15/2006

Fumihiko Mizukami

CU-5078 BWH

3770

26530 7590 02/17/2011
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EXAMINER

MCCLELLAND, KIMBERLY KEIL

ART UNIT

PAPER NUMBER

1745

MAIL DATE

DELIVERY MODE

02/17/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/592,975	Applicant(s) MIZUKAMI ET AL.	
	Examiner KIMBERLY K. MCCLELLAND	Art Unit 1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/21/10.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 September 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

Response to Amendment

1. Applicant is reminded they need to explicitly point out where support for all the newly claimed features comes from as required by MPEP 714.02 and 2163.06. See 37 CFR 1.111.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the step of contacting with a side of the base material must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

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Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent NO. 5,744,219 to Tahara in view of U.S. Patent No. 5,928,456 to Souparis.

5. With respect to claim 1, Tahara discloses a foil transfer method, including preparing the thermal transfer sheet (40) having the transfer layer (33/34/35 or 2/5), in which the hologram or the diffraction grating is formed in such a way that a visual effect by an interference pattern thereof is obtained in only one direction (column 14, lines 61-64), transferring to the transfer object the transfer layer in which the hologram or diffraction grating is formed by moving a heat source (37/7) of a unit area in a predetermined direction contacting (Figures 4 and 9) with a side of the base material (31/4). Tahara does not specifically disclose wherein the predetermined direction of the heat source is set to be the direction in which the visual effect of the hologram or the diffraction grating is obtained.

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6. Souparis discloses a transferring method, including moving a heat source (31/32) of a unit area in a predetermined direction contacting with a side of the base material (1) wherein the predetermined direction of the heat source is set to be the direction in which the visual effect of the hologram or the diffraction grating is obtained (i.e. horizontal direction, see figure 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the horizontal heat source movement taught by Souparis with the method of Tahara. The motivation would have been to ensure reaction/attachment of the transfer layer to the substrate (column 4, lines 45-48).

7. Examiner notes a preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

8. As to claim 2, Tahara discloses the heat source is a heat generation element of a thermal head (column 14, lines 61-64).

9. Claims 1-2 and 4-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent Application Publication No. 08-258437 to Tawara (machine translation provided) in view of U.S. Patent No. 5,928,456 to Souparis.

10. With respect to claim 1, Tawara discloses a foil transfer method, including preparing the thermal transfer sheet having the transfer layer (6/7/8), in which the

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hologram or the diffraction grating is formed in such a way that a visual effect by an interference pattern thereof is obtained in only one direction, transferring to the transfer object the transfer layer in which the hologram or diffraction grating is formed by moving a heat source (see paragraph 0004) of a unit area in a predetermined direction contacting with a side of the base material (4) to transfer the transfer layer (Figure 1). Tawara does not specifically disclose wherein the predetermined direction of the heat source is set to be the direction in which the visual effect of the hologram or the diffraction grating is obtained.

11. Souparis discloses a transferring method, including moving a heat source (31/32) of a unit area in a predetermined direction contacting with a side of the base material (1) wherein the predetermined direction of the heat source is set to be the direction in which the visual effect of the hologram or the diffraction grating is obtained (i.e. horizontal direction, see figure 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the horizontal heat source movement taught by Souparis with the method of Tawara. The motivation would have been to ensure reaction/attachment of the transfer layer to the substrate (column 4, lines 45-48).

12. Examiner notes a preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

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13. As to claim 2, Tawara discloses the heat source is a heat generation element of a thermal head (See paragraph 0004).

14. As to claim 4, Tawara discloses the hologram is a rainbow hologram (See paragraph 0016).

15. As to claim 5, Tawara discloses the hologram is a computer hologram having interference patterns each being formed as band-shaped element range (See paragraph 0015; and 0026).

16. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent NO. 5,744,219 to Tahara in view of U.S. Patent No. 5,928,456 to Souparis as applied to claims 1-2 above, and further in view of U.S. Patent Application Publication No. 2002/0168513 to Hattori et al.

17. As to claim 3, Tahara does not specifically disclose the heat source is a laser.

18. Hattori et al. discloses an imaging method, including in the art of holographic transfer (See paragraph 0225) it is known as an art-recognized equivalent to substitute a laser for a thermal head as a source of heat during thermal transfer (See paragraph 0211). It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the art-recognized equivalent laser for the thermal head heat source disclosed by Tahara.

19. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Application Publication No. 08-258437 to by Tawara (machine translation

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provided) in view of U.S. Patent No. 5,928,456 to Souparis as applied to claims 1-2 and 4-5 above, and further in view of U.S. Patent Application Publication No. 2002/0168513 to Hattori et al.

20. As to claim 3, Tawara does not specifically disclose the heat source is a laser.

21. Hattori et al. discloses an imaging method, including in the art of holographic transfer (See paragraph 0225) it is known as an art-recognized equivalent to substitute a laser for a thermal head as a source of heat during thermal transfer (See paragraph 0211). It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the art-recognized equivalent laser for the thermal head heat source disclosed by Tawara.

Response to Arguments

22. Applicant's arguments with respect to claims 1-5 have been considered but are moot in view of the new ground(s) of rejection. Applicant's remaining pertinent arguments are addressed below:

23. With respect to applicant's assertion that a laser beam heating the base material illustrates the claimed limitation of "contacting a heat source with a base material", examiner disagrees. Examiner notes the laser itself, not the beam, is the heat source. Therefore, the illustration of heating via radiation, instead of contact, does not inherently illustrate the current claims.

24. Applicant asserts the relief pattern is only found in slipping layer (36), as illustrated in Figure 6. However, this argument does not accurately reflect the

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disclosure of Tahara. Tahara specifically discloses the relief pattern is found in the reflective transfer layer (34; column 5, lines 35-50), not the slipping layer (36).

Examiner notes layer 36 is not transferred to the target substrate in Tahara, but instead provides a smooth surface on which the thermal head may travel. Thus applicant's assertion that the relief pattern may only be located in the slipping layer is found to be inaccurate.

Conclusion

25. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KIMBERLY K. MCCLELLAND whose telephone number

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is (571)272-2372. The examiner can normally be reached on 8:00 a.m.-5 p.m. Mon-Thr.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Philip C. Tucker can be reached on (571)272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kimberly K McClelland/
Examiner, Art Unit 1791

KKM